

REMARKS

A final rejection was mailed January 12, 2005. Applicant expresses appreciation for the interview conducted between the undersigned and Examiner DeSanto on January 21, 2005. This paper elaborates on the points discussed during the interview. Claims 1, 4-6, and 18-22 are pending in the application. Claims 2, 3, and 23 are currently withdrawn from consideration. Reconsideration of the application is respectfully requested.

The rejection of claims 1, 4-6, and 18-22 under 35 USC 102(b) as being anticipated by Dye et al is respectfully traversed. One of the structural differences between Dye et al and the rejected claims is that the claimed balloon is inflated via the passage arrangement between the infusion lumen and the balloon. The recited structure causes the balloon to inflate to a pressure equal to the pressure of the fluid being delivered to the body through the infusion lumen. In Dye et al, the balloon is inflated according to a volume of fluid supplied via an inflation lumen 32. In other words, the claimed passage arrangement supplies inflation fluid to the balloon from a fluid flowing between a fluid inlet and a fluid outlet (i.e., siphoning off a portion of the flow and inflating the balloon according to the pressure in the infusion lumen), while the only outlet of the inflation lumen in Dye et al is into the balloon itself (i.e., the balloon is inflated according to the volume of fluid supplied to the inflation lumen). Since there is no lumen in Dye et al that delivers fluid to both a patient's vessel and an inflatable balloon in parallel, Dye et al fails to disclose the structure recited in claims 1, 4-6, and 18-22.

The rejection of claims 1, 4-6, and 18-22 under 35 USC 102(b) as being anticipated by Lafontaine et al is respectfully traversed. As in Dye et al, the balloon in Lafontaine et al is inflated according to a volume of fluid supplied rather than a pressure. Lafontaine does not have a structure that maintains a fluid flow through a lumen and into a body which simultaneously provides fluid to the balloon for inflating it. Instead, prepping the balloon in Lafontaine requires allowing only one fluid inlet in the guide wire lumen and only one outlet (e.g., elastic tube 55) into the balloon. Since

Lafontaine fills the balloon by volume, a tubular fitting 56 is provided around the balloon to limit the inflation. Thus, claims 1, 4-6, and 18-22 are allowable over Lafontaine.

In addition, the passage arrangement recited in claims 1, 4-6, 18, and 19 is the sole means of delivering inflation fluid to the balloon. Prior to use in vivo, the balloon of Lafontaine is primed with a small amount of fluid through a one-way valve 51. During angioplasty, the Lafontaine balloon is inflated by a fluid bolus 18 via shaft 41a. Thus, Lafontaine inflates its balloon from multiple fluid sources and likewise fails to meet this limitation.

The rejection of claims 1, 4-6, and 18-22 under 35 USC 102(b) as being anticipated by DiCaprio et al is respectfully traversed. DiCaprio is another example of the use of a guide wire lumen 32 to preload a balloon 22 with fluid prior to insertion into a patient. A separate inflation lumen 28 provides inflation fluid to balloon 22 during in vivo use. As in Dye and Lafontaine, the balloon in DiCaprio is inflated according to a volume of fluid supplied rather than a pressure. Lafontaine does not have a structure that maintains a fluid flow through a lumen and into a body which simultaneously provides fluid to the balloon for inflating it. Instead, prepping the balloon requires allowing only one fluid inlet in the guide wire lumen and only one outlet into the balloon. In addition, the passage arrangement recited in claims 1, 4-6, 18, and 19 is the sole means of delivering inflation fluid to the balloon. DiCaprio inflates the balloon via separate passages at separate times (i.e., lumen 32 during preload and lumen 28 during angioplasty). Therefore, claims 1, 4-6, and 18-22 are allowable over DiCaprio.

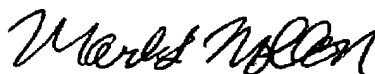
Since generic claims 1, 5, and 18 are allowable, dependent claims 2, 3, and 23 should be considered and likewise allowed.

The specification has been amended to bring it into better conformity with the claim limitation that the passage arrangement constitutes the sole means of delivering inflation fluid to the balloon. As is abundantly clear from the original specification and drawings, inflation fluid is provided only by infusion lumen 16. As was stated in original paragraph [0004], the auto-inflating balloon is in fluid

communication with the infusion lumen and thus inflated by pressurized CPG being delivered to the heart. Throughout the specification and in connection with Figures 1-4, balloon inflation is only described to occur simultaneously with conduction of fluid to the patient's vessel. Thus, infusion lumen 16 is the sole means of delivering inflation fluid to the balloon, and paragraph [0031] has been amended to explicitly reflect this aspect of the invention.

In view of the foregoing amendment and remarks, claims 1-6 and 18-23 are now in condition for allowance. Favorable action is respectfully solicited.

Respectfully submitted,



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